# Do It Yourself

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Ice, Snow and Extreme Cold: Saving Your Pipes

From "Weathering the Storm"

episode DWTS-105 -- More Projects »

An expensive mistake that some homeowners make in winter is "not" to prepare the pipes in their home for freezing and extreme temperatures.

A tiny break alone (just 1/8" thick -- the width of a nickel) in a pipe can cause 250 gallons of water per day to be released in your house.

Did You Know? Insurance companies have spent more than \$4,000,000,000 (yes, billion) in the past 10 years for frozen and busted pipes alone.



This segment shares information on how you can prepare your home's pipes for harsh winter weather.

# What to Do If Your Pipes are Frozen

- If the pipe is just partially frozen it allows a trickle from the faucet. Be sure to open both the hot and cold faucets and let the trickle continue until the ice melts.
- A totally frozen pipe allows no water through at all. Be sure to shut off the main water valve and search for the break. You may want to use a hair dryer or heating pad to thaw the pipe, but "never" use a torch because you could burn your house down.
- If you do find a break in the pipe, leave the water off and call plumber -- unless your handy and can make the repair yourself.

**Note:** For step-by-step instructions to help you replace a section of frozen, burst copper pipe, click <u>here</u> for a segment of DIY's *Complete Fix-It*.

- Broken pipes usually happen in older homes and mobile homes because colder air can get to the pipes. If you seal up the cold-air leaks you cut the risk of frozen pipes.
- For your outside faucet remove the hose and be sure to drain it before storing. For extra
  protection you can place a foam cap over the handle.

- Let your faucets run a "trickle" of water and be sure to open the cabinet doors to let heat penetrate the pipes that exist on an outside wall.
- Applying electric heat tape to your pipes can be helpful as well. This will keep the piping just above freezing, which is adequate for battling frozen pipes. Heat tape comes with a thermostat that turns it on and off. Run it right along the pipe -- don't wrap around the pipe. Be sure to follow the manufacturer's instructions carefully.

# **Installing Pipe Heating Cable**

- 1. Pipe heating cable can be attached along water supply pipes that will be exposed to cold air (despite your best attempts to limit such exposure) and are therefore prone to freezing. It comes in various lengths and types for different pipe widths. Your heating cable should have a built-in thermostat to sense exactly when to draw current and warm the pipe just above freezing (figure A).
- 2. This heating cable's orange thermostat has a black "button" side (figure B), which must be turned over and taped firmly to the pipe in order to work properly. Other thermostats work differently. Follow manufacturer's instructions for the cable you use.
- 3. Using electrical tape, plastic ties or the attachments provided with your heating cable (never use wire), begin by firmly attaching the thermostat to the pipe you wish to heat. Be sure the plug lead reaches the power outlet. Don't use an extension cord. Since water contact is possible, the outlet should have a Ground Fault Interrupter Circuit (GFIC) (figure C). Never install heating cable if there are active leaks.
- 4. The kind of pipe heating cable shown must be attached flat and parallel to the pipe. Tape at short intervals (**figure D**) for good pipe contact. Some other products for warming pipe are wrapped around the pipe. Follow manufacturer's instructions, however, never wrap any cable across or over itself. This creates a fire hazard.
- 5. While new pipe heating cable is probably intact (**figure E**), be aware that each year before the cold season begins, you should inspect all heating cable installed in the past. Replace any cable that

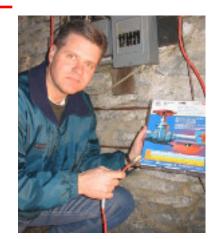


Figure A



Figure B



Figure C

has cracked or shows frayed insulation.

In the next segment find out how to prepare for the worst -- ice!

#### **RESOURCES:**

# National Weather Service (NOAA) Weather Alert Information

For guidance on how to get a NOAA weather radio to alert you to weather emergencies, visit this National Weather Service/NOAA site.

Website: <a href="https://www.nws.noaa.gov/nwr/nwrrcvr.htm">www.nws.noaa.gov/nwr/nwrrcvr.htm</a>

# Federal Emergency Management Administration (FEMA) Winter Storm Information

The Federal Emergency Management Administration (FEMA) has resource information to help you prepare for winter storms.

Website: www.fema.gov/hazards/winterstorms/



Figure D



Figure E

#### The American Red Cross Severe Winter Weather Information

Click <u>here</u> for a wealth of information on severe winter weather, and click <u>here</u> to information on how to prevent and how to safely thaw frozen pipes.

#### New York State Electric & Gas Corp. (NYSEG) Power Generator Information

Click <u>here</u> for extensive information on emergency power generators. This is a .pdf file and you'll need Adobe Acrobat to download the file.

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